



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/626,009

07/24/2003

Ashoke K. SenGupta

28216/38681B

9906

4743

7590

05/01/2008

MARSHALL, GERSTEIN & BORUN LLP
233 S. WACKER DRIVE, SUITE 6300
SEARS TOWER
CHICAGO, IL 60606

EXAMINER

CHEUNG, WILLIAM K

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

05/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/626,009	Applicant(s) SENGUPTA ET AL.	
	Examiner WILLIAM K. CHEUNG	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-18, 34-41 and 43-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-18, 34-41 and 43-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the amendment filed February 4, 2008, claims 13, 19-33, 42 have been cancelled. Claims 1-12, 14-18, 34-41, 43-53 are pending.
2. In view of the amendment filed February 4, 2008, the objection of Claims 1-5, 14-18, 34-37 is withdrawn.
3. In view of the argument filed February 4, 2008, the rejection of Claims 38-53 under 35 U.S.C. 103(a) as obvious over Lukenbach et al. (WO 01/01949), is withdrawn.

Claim Rejections - 35 USC § 112

4. Claims 1-5, 14-18, 34-37, 43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 (7-9), the recitation of the viscosity range “at least 50,000 cps at 0.5 rpm of spindle speed” and the recited “dosage of about 4% by weight of the hydrophobic liquid” are not supported by the specification and the claims original presented.

Claim 35 (line 2-3), claim 36 (line 2-3), claim 43 (line 2-3), the recited amount of smectite clay "3.4% by weight" are not supported by the original specification.

Applicants' specification (page 19), the table clearly disclose the layered silicate to be in the range "about 5 to about 70%".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1796

7. Claims 1-5, 14-18, 34-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lukenbach et al. (WO 01/01949) for the reasons adequately set forth from paragraph 7 of the office action of October 4, 2007.

1. (Currently amended) A composition for thickening hydrophobic liquids comprising a smectite clay and an amphipathic copolymer comprising PEG-30 dipolyhydroxystearate, said smectite clay selected from the group consisting of bentonite, montmorillonite, saponite, hectorite, beidellite, stevensite, and mixtures thereof, and wherein the amphipathic copolymer, upon adsorption onto the smectite clay surface to form a surface-modified smectite clay, is able to modify the clay-surface in a manner such that the surface-modified smectite clay is capable of thickening a hydrophobic liquid to a Brookfield viscosity of at least 50,000 cps at 0.5 rpm of spindle speed, when dispersed in the hydrophobic liquid at a dosage of about 4% by weight of the hydrophobic liquid~~surfaces of said smectite clay modified by an amphipathic copolymer comprising PEG-30 dipolyhydroxystearate.~~

Lukenbach et al. (page 51, claim 28) disclose a silicate material comprising a PEG-30 dipolyhydroxylstearate. Lukenbach et al. (page 13, line 18-20) disclose the composition comprises mica, alumina, silica, calcium silicate (a wollastonite clay), sodium magnesium fluorosilicate (a modified version of talc or bentonite clay), and mixture thereof. Lukenbach et al. (page 14, line 1-2) also disclose the incorporation of propylene glycol, hexylene glycol, butylenes glycol which can function as thickening aid. Lukenbach et al. (page 15, line 10-11) disclose the incorporation of lipophilic (hydrophobic) compounds which include liquid hydrocarbon such as hydrogenated polydecene/ cetyl alcohol, stearyl alcohol mixture. Lilembacj et al. (page 31, example 7) clearly teach a process that involves stirring to achieve a homogenous composition with

Art Unit: 1796

a mixer. In view of the substantially identical composition and the incorporation of similar components such as calcium silicate (a wollastonite clay) and sodium magnesium fluorosilicate (a modified version of talc or bentonite clay) between the composition of Lukenbach et al. and the composition of claims 1-7, 14-18, 34-37, the examiner has a reasonable basis that the claimed "layered" feature and the "amphiphathic" feature of claim 1, the "smectic" feature of claim 7, the dielectric constant of claim 4, and the viscosity features of claims 35-36 are inherently possessed in Lukenbach et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Applicant's arguments filed February 4, 2008 have been fully considered but they are not persuasive. Applicants argue that the claimed invention relates to hectorite, not wollastonite clay or a modified talc, but is a fluorine-modified hectorite. However, applicants must recognize that the claimed "hectorite" still generically include a modified hectorite, which is clearly disclosed in Lukenbach et al.

Regarding applicants' argument that the claimed invention is not considered obvious in view of the "unexpected results" disclosed in the Declaration filed February 4, 2008. However, in view of the new matter 112 rejection set forth, the examiner has a reasonable basis to maintain the rejection 102-3 rejection set forth.

8. Claims 38-53 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Vatter et al. (US 2002/0028223) as evident by Alzo product literature (<http://www.alzointernational.com/emollients.htm>).

38. (Previously presented) A composition for thickening hydrophobic liquids comprising a layered silicate material, surfaces of said layered silicate material modified by an amphipathic copolymer comprising BIS-PEG-15 Dimethicone/IPDI Copolymer.

Vatter et al. (abstract) disclose an anhydrous skin treatment composition. According to Vatter et al., the anhydrous skin treatment composition comprises the Bis-PEG-15 Dimethicone/IPDI copolymer as claimed (page 9, 0132), also known by the tradename of Polyderm PPI-SI-WS, supplied by Alzo. Vatter et al. (page 7, 0103) disclose the use of pigments/powder fillers that include smectite clays such as organically modified montmorillonite. Vatter et al. disclose that the composition comprises (hydrophobic liquid) vegetable oil (page 10, 0158), and polyhydric alcohol esters (page 10, 0164). For thickening (or solidifying), Vatter et al. (page 11, 0170) disclose the use of waxy materials. Vatter et al. (page 20, claim 4) disclose that the composition comprises propylene glycol, and hexylene glycol. Vatter et al. (page 7, 0102; page 14, example 1) clearly disclose a method involving high shear mixing (Silverson L4RT Mixer at 9000 rpms) for preparing a composition comprising functional particulate materials such as TiO₂ and talc. Vatter et al. (page 20, claim 1-4) clearly disclose the weight percent that fully encompasses weight percent of the components as claimed. In view of the substantially identical composition disclosed in Vatter et al.

Art Unit: 1796

and as claimed and that the disclosed smectite clay is mixed with Polyderm PPI-SI-WS, the examiner has a reasonable basis that the claimed "layered silicate material modified with an amphipathic copolymer comprising Bis-PEG-15 Dimethicone/IPDI copolymer" of claim 38, the Brookfield viscosity of claim 43, and the dielectric constant of less than about 10 of claim 44 are inherently possessed in Vatter et al., Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

ALZO International Urethane Emollients and Conditioners

<http://www.alzointernational.com/emollients.htm>

Art Unit: 1796

PRODUCT	INCI NAME
Polyderm PPI-BZ	Benzyl Alcohol-Ethylene Glycol/IPDI Copolymer
Polyderm PPI-CA-15	Di-PEG-15 Cocamine/IPDI Copolymer
Polyderm PPI-CO	Castor Oil/IPDI Copolymer
Polyderm PPI-CO-H	Hydrogenated Castor Oil/IPDI Copolymer
Polyderm PPI-CO-40	PEG-40 Hydrogenated Castor Oil/IPDI Copolymer
Polyderm PPI-CO-200	PEG-200 Hydrogenated Castor Oil/IPDI Copolymer
Polyderm PPI-DGDIS	Diglycerol Diisostearate/IPDI Copolymer
Polyderm PPI-GH	Glycereth-7 Hydroxystearate/IPDI Copolymer
Polyderm PPI-PE	Diethylene Glycol Adipate/IPDI Copolymer
Polyderm PPI-SA	Di-2 PEG Soyamine/IPDI Copolymer
Polyderm PPI-SI	Dimethiconol/IPDI Copolymer
Polyderm PPI-SI-50	Dimethiconol/IPDI Copolymer 50%
Polyderm PPI-SI/SA	Dimethiconol-PEG-2 Soyamine/IPDI Copolymer
Polyderm PPI-SI-WI	Dimethicone Copolyol/IPDI Copolymer water insoluble
Polyderm PPI-SI-WS	Dimethicone Copolyol/IPDI Copolymer water soluble
Monoderm MPI-BZ	Benzyl Alcohol Dimer/IPDI
Monoderm MPI-N-1-100	PEG-100 Methyl Alcohol Dimer/IPDI
Monoderm MPI-12-3	Laureth-3 Alcohol Dimer/IPDI
Monoderm MPI-1-14	Isomyristyl Alcohol Dimer/IPDI
Monoderm MPI-1-16	Isocetyl Alcohol Dimer/IPDI
Monoderm MPI-1-18	Isostearyl Alcohol Dimer/IPDI
Monoderm MPI-N-18-100	PEG-100 Stearyl Ether/Dimer/IPDI
Monoderm MPI-1-20	Octyldodecyl Alcohol Dimer/IPDI
Monoderm MPI-1-24	2-Decyltetradecyl Alcohol Dimer/IPDI
Monoderm MPI-RC	Ricinoleamidopropyl Amine Dimer/IPDI

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/William K Cheung/
Primary Examiner, Art Unit 1796

William K. Cheung, Ph. D.

Primary Examiner

April 25, 2008

Application/Control Number: 10/626,009
Art Unit: 1796

Page 10